

# Systematic Notes on Japanese Strangalia

(Col. Ceramb.)

By Kazuo Ohbayashi

In the present paper I have dealt with four species of Japanese *Strangalia*, one of which is seemed to be new to science and described below.

These four species resemble each other and are variable in colour even in both sexes of the same species. Confusion, therefore, is arisen in determinating the species. I have fortunately examined many specimens of this group, which were collected by my friends or by myself, and found out the extent of variation of each species.

Mr. M. Hayashi has deposited on loan all of this collection of this group for my study. Messrs. H. Hattori, N. Hirata, M. Iga, Y. Kuroda and K. Matsuda gave me also many specimens from various localities. I express my sincere thanks for above mentioned gentlemen. My obligation is also due to Dr. Leo Heyrovsky who has given me an opportunity to publish the paper in this magazine.

## 1. *Strangalia lesnei* (Pic)

*Leptura* (*Stenura*) *nymphula* var., Bates, 1884, Jour. Linn. Soc. Lond. Zool., XVIII, p. 220.

*Leptura nymphula* Bates var. *lesnei*, Pic, 1901, Bull. Mus. Hist. Nat. Paris, VII (2), p. 60.

*Strangalia* (s. str.) *nymphula* Bates var. *lesnei*, Aurivillius, 1912, Col. Cat., 39, p. 238.

*Strangalomorpha nymphula* Bates ab. *lesnei*. Matsushita, 1933, Jour. Fac. Agr. Hokk. Imp. Univ., XXXIV (2), p. 208; Mitono, 1940, Cat. Col. Jap. 94, Ceramb., p. 39.

*Strangalia contracta*, Hirayama (nec Bates), 1940, Ins. Tab., p. 154, pl. 49, fig. 3.

*Strangalomorpha betesi*, Tamanuki, 1942, Fauna Nipponica, Ceramb. 2, *Lepturinae*, p. 134, fig. 153; Chûjô et Hayashi, 1951, Bull. Takarazuka Ins., no. 78, p. 5. (nov. syn.)

This species was originally noticed by Bates, who considered it to be a variety of his *nymphula* and gave a short description. Afterwards, Pic proposed a new name for it, but it is a good valid species and *Strangalomorpha betesi* Tamanuki is undoubtedly a synonym of it.

While *S. nymphula* (Bates) is well characterized by its constantly black underside of body and black antennae with the joints ninth, tenth and the apical half of eighth always white in both sexes, this species is quite distinct from *nymphula* by the prothorax less strongly constricted anteriorly and the different markings of the elytra. The elytra have broad black stripes on both sides including two isolated small spots of brownish yellow, and these spots are sometimes coalesced with ground colour of elytra. Characteristic coloration is also found in the following points: in the male, antennae are blackish with the apical three joints and the basal parts of third to eighth joints white, abdomen is brownish yellow except the first three segments blackish; in the female, antennae are blackish with the joints ninth, tenth and the bases of fourth to eighth and of the last white, abdomen is brownish yellow with the basal margins of the first to fourth segments blackish. Length: 9—11 mm.

Distr.: Japan (Honshû, Shikoku, Kyûshû).

## 2. *Strangalia contracta* Bates

*Strangalia contracta*, Bates, 1884, Jour. Linn. Soc. Lond. Zool. XVIII, p. 223.

*Strangalia (Strangalina) contracta*, Aurivillius, 1912, Col. Cat. 39. p. 241.

*Strangalomorpha contracta*, Matsushita, 1933, Jour. Fac. Agr. Hokk. Imp. Univ., XXXIV (2), p. 208; Ohbayashi, 1936, Kansai Konchu Zasshi, IV (1), p. 15.

*Strangalina contracta*, Mitono, 1940, Cat. Col. Jap., 94. Ceramb. p. 52; 1950, in Icon. Ins. Jap. ed. II. p. 1221, fig. 3515; Ohbayashi 1942, Ins. World, Gifu, 46 (539), p. 201.

The present species is distinct from the allied ones by the form of elytra which is strongly narrowed apically and abbreviated. In the male, the last two abdominal segments are exposed from elytra and the last sternite is strongly concave and broadly sinuate posteriorly, antennae are gradually thickened apically, with the sixth to the last joints bearing a pit on each apex, and exceed the apices of elytra by the apical two joints. In the female,

the elytra cover the base of the last abdominal segment, antennae have no pit on the apex of each joint and exceed the apices of elytra only by the last joint.

Body black; face und elytra brownish yellow with the suture and sides of the latter black. The lateral black vitta generally emits two short branches near the base and does not cover the shoulder. Antennae infusate, with the apices of sixth to tenth joints blackish in the male, apical three joints usually black in the female. Fore legs and bases of middle and hind femora are brownish yellow. Variable in colour caused by reduction of black colour into brownish yellow or reddish brown. But the last abdominal segment in the male and the apical three joints of antennae in the female are constantly black. Though I have recognized the following four forms, the intermediates between them have also been observed. Length: 9—12 mm. (Chinese and Formosan examples of *m. sozanensis* Mitono are measured 12 bis 16 mm.).

Distr.: Japan (Honshû, Shikoku, Kyûshû), East China, Formosa. Typical form has been found in Honshû only.

**m. ohbayashii** Matsushita

*Strangalia (Strangalina) ohbayashii*, Matsushita, 1933, Jour. Fac. Agr. Hokk. Imp. Univ., XXXIV (2), p. 220, pl. I, fig. 11.

*Strangalia ohbayashii*, Ohbayashi, 1936, Kansai Kochu Zasshi, IV (1), p. 15,

*Strangalia (Strangalina) hakonensis* Matsushita ab. *ohbayashii*, Matsushita, 1938, Ins. Matsum., XII (2—3), p. 100; Mitono, 1940, Cat. Col. Jap., 94, Ceramb., p. 54.

*Strangalia contracta* Bates (= *m. lineatocollis* Gressitt) ab. *ohbayashii* Tamanuki, 1942, Fauna Nipponica, Ceramb. 2, Lepturinae, p. 207, nota.

Closely allied to the typical form, but the clypeus is provided with two small black spots.

Distr.: Japan (Honshû).

**m. unilineatocollis** nov.

*Strangalia ohbayashii*, Hirayama (nec Matsushita), 1940, Ins. Tab., p. 148, pl. 47, fig. 29.

This is an intermediate form between the typical one and *m. lineatocollis* Gressitt: Hind part of head and pronotum are black with a median stripe of brownish yellow, which is occasionally

interrupted. Underside of body is entirely black or sometimes brownish yellow with the first to fourth ventral segments of abdomen reddish brown and slightly darkened.

8 types; Ohkidaira in Aomori Pref. (K. Shimoyama), Amagodani in Gifu Pref. (K. Ohbayashi), Mt. Hira in Shiga Pref. (S. Ueno), Mt. Kôya in Wakayama Pref. (M. Hayashi) Honshu.

#### m. *lineatocollis* Gressitt

*Strangalia contracta*, Bates (in part), 1884, Jour. Linn. Soc. Lond. Zool., XVIII, p. 223.

*Strangalina lineatocolle*, Gressitt, 1937, Kontyû, XI (4), p. 319, fig. 3.

*Strangalia (Strangalina) hakonensis* Matsushita ab. *lineatocolle*, Matsushita, 1938, Ins. Matsum., XII (2—3), p. 100.

*Strangalina hakonensis* Matsushita ab. *lineatocolle*, Mitono, 1940, Cat. Col. Jap., 94, Ceramb., p. 53.

*Strangalina contracta* + ab. *lineatocolle*, Tamanuki, 1942, Fauna Nipponica, Ceramb. 2, Lepturinae, p. 204, 207 nota, fig. 215, 216.

This form was already noticed by Bates and he stated on the colour variation of pronotum in his description of *contracta*. „variat linea dorsali maculaque laterali fulvis”. Afterwards Gressitt considered it a valid species, giving a new name, but it is evidently one of the forms of *S. contracta* Bates.

Black colour of body and antennae is rather reduced; head and pronotum striped along the median line with brownish yellow, and the latter marked with the same colour on both sides. Underside brownish yellow: the first to fourth abdominal segments reddish brown, but sometimes blackish in the male; all the abdominal segments reddish brown in the female.

Distr.: Japan (Honshû, Shikoku, Kyûshû).

Remarks: Tamanuki's figure of no. 215 is marked as ♂, but it is incorrect and surely be ♀; of no. 216 is undoubtedly ♂, though without any mark.

#### m. *sozanensis* Mitono

*Strangalia (Strangalina) sozanensis*, Mitono, 1938, Trans. Nat. Hist. Soc. Formosa, XXVIII (172), p. 17, fig. 1.

*Strangalina sozanensis*, Mitono, 1938, Nippon no Kôchû, II (1), p. 50; 1940, Cat. Col. Jap., 94, Ceramb., p. 55; Tamanuki, 1942, Fauna Nipponica, Ceramb. 2, Lepturinae, p. 202, fig. 214.

*Strangalia lineatocollis*, Gressitt (nec Gressitt, 1937), 1939, Notes d'Entom. Chin., VI (4), p. 93, pl. II, fig. 1.

*Strangalina contracta* Mitono, 1941, Mushi, XIV (1), p. 48.

Closely allied to *m. lineatocolle* Gressitt, but distinguished from the latter by strongly reduced coloration into brownish yellow. Pronotum is provided with only two narrow black stripes.

Distr.: Japan (Honshû, Kyûshû), East China, Formosa.

### 3. *Strangalia hakonensis* Matsushita

*Strangalia (Strangalina) hakonensis*, Matsushita, 1933, Jour. Fac. Agr. Hokk. Imp. Univ., XXXIV (2), p. 218.

*Strangalia hakonensis*, Ohbayashi, 1936, Kansai Kondu Zasshi, VI (2), p. 15.

*Strangalia (s. str.) hakonensis*, Tamanuki et Ooishi, 1937, Mushi, IX (2), p. 110.

*Strangalina hakonensis*, Mitono, 1940, Cat. Col. Jap., 94, Ceramb., p. 53.

*Strangalina contracta hakonensis*, Tamanuki, 1942, Fauna Nipponica, Ceramb. 2, Lepturinae, p. 206, fig. 217.

This species is closely allied to *S. contracta* Bates, but the body is smaller and more angustate than the latter. Antennal pits are rather small and obsolete, provided only on the apices of seventh to the last joints. It is also well characterized by blackish abdomen except the first segment yellowish and sometimes the fourth bearing brownish yellow marking in the male. In the female, the abdomen is also blackish, usually the first and second segments are brownish yellow with the latter bordered with black in front and behind, and the third is sometimes marked with brownish yellow. Length: 9—10 mm.

Distr.: Japan (Honshû, Shikoku, Kyûshû).

### 4. *Strangalia hosohana* sp. nov.

Slender, narrowed posteriorly, covered with golden pubescence on the upper surface and with silvery one on the underside. Head black, mouth parts brownish, finely and closely punctate, eyes prominent. Antennae brownish yellow, slightly thickened towards the apices, third joint a little longer than the first and subequal to fifth, fourth slightly shorter than fifth, fifth to the apex gradually shortened; in the male, a little exceed the apices of elytra, without pits, the first to fourth, apices of fifth to tenth, base of eleventh darkened: in the female, reach the apical one fifth of elytra, basal four or five and apical three joints strongly darkened. Pronotum black, finely and closely punctate, elongate campalulate,



slightly dilated on the middle of the sides, anterior margin not collared, posterior margin slightly sinuate, hind angles obtuse and not covering the humeral angles of elytra. Scutellum black, triangular, finely and closely punctate. Elytra brownish yellow, with black suture and lateral stripes which are combined at the apices, the lateral stripe does not cover the shoulder; strongly and sparsely punctate at the base, closely towards the apex, which is obliquely truncate and the outer angle provides a very short conical spine; in the male, strongly narrowed towards the middle, thence slightly dilate and dehiscient posteriorly, and reaching the base of fifth abdominal segment; in the female less strongly narrowed posteriorly and covering the base of fifth abdominal segment. Underside of body black. In the male, abdomen black (fourth segment brownish yellow with the basal margin blackish and sometimes third segment bearing brownish yellow markings on the posterior area, fifth sternite slightly depressed, but not concave and the terminal margin emarginate). In the female, abdomen brownish yellow with the fifth segment black, the bases of the first to fourth segments narrowly black bordered, adjoining the border of each segment provided two semicircular black marks on the sides of the centre. Legs brownish yellow, apical parts of hind femora, all tibiae and tarsi blackish, but the coloration somewhat variable. Length: 7—9,5 mm.

Holotype: ♂ Nidoage in Gumma Pref., Honshū, July 12, 1950, collected by H. Hattori; syntypes: 10 ex. the same as above, 4 ex. the same locality, July 28, 1949 (H. Hattori); 6 ex.: Mt. Kōya in Wakayama Pref., Honshu; July 24, 1949 (M. Hayashi), Mt. Sara in Ehime Pref., Shikoku, July 9, 1950 (M. Miyatake), Mt. Fukuchi in Fukuoka Pref., Kyūshū, May 23, 1943 (ex M. Hayashi), the same locality, May 20, 1947 (K. Matsuda).

Three types are preserved in Mr. M. Hayashi's collection. One is in the Entomological Laboratory of Matsuyama Agricultural College. Two are deposited in Dr. Leo Heyrovský's collection. The other types are preserved in my collection.

This species is closely allied to *S. hakonensis* Matsushita, but can be distinguished from it by the peculiar coloration of abdomen in both sexes, less swollen pronotum on the sides, absence of pit on each antennal joint, and not strongly prolonged fifth abdominal segment in the male.